



Forest Service
U.S. DEPARTMENT OF AGRICULTURE

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# The University of Arkansas Vision Grows Mass Timber Influence

The inspiration began in 2014 when the newly hired University of Arkansas dean of the Fay Jones School of Architecture and Design, Peter MacKeith, asked one simple question: "What does it mean to be a land-grant university with a school of architecture and design, in a State that is almost 60 percent covered in forest?"

It soon became clear that the best answer to this question involved mass timber. At that time, mass timber, more specifically cross-laminated timber (CLT), was a new concept as a building material in the United States. Cross-laminated timber is an engineered wood product developed by bonding

Interior of Adohi Hall at the University of Arkansas. Adohi is the Cherokee word for "woods." Courtesy photo by Russell Cothren.

layers of wood together to form an exceptionally strong alternative to carbon-intensive steel or concrete—all while serving as carbon storage itself.

## **Local Inspiration Creates National Illustration**

Turning to his already deep stable of contacts, Dean MacKeith enlisted the help of the U.S. Department of Agriculture (USDA), Forest Service. He was successful in using both competitive and discretionary funding from the agency's <u>Wood Innovations</u> program as part of the catalyst for answering the critical question.

Three Wood Innovations grants served as stepping-stones to today's success:

# 1. From Forest to Campus: The Innovative Timber University

One of the main objectives for this effort was to determine the regional viability to use mass timber and demonstrate its sustainable, economic, and aesthetic advantages. Born from this first grant, Adohi Hall is the Nation's first large-scale mass timber residence hall.



The newest rendering of the Anthony Timberlands Center for Design and Materials Innovation at the University of Arkansas. The building will include a high-bay fabrication workshop, studios, seminar and conference rooms, and faculty offices. Courtesy image by Grafton Architects.

### 2. Arkansas Timber Design Excellence Conference

For 3 days in late 2019, the Fay Jones School of Architecture and Design hosted a unique gathering of internationally prominent architects and engineers. Focusing on enlightened, creative use of mass timber, these experts demonstrated the potential and beauty of wood's architectural uses. The timely conversations and connections that started here continue to reverberate throughout the region and the Nation.

## 3. Anthony Timberlands Center for Design and Materials Innovation

Designing a building that will serve as a showcase for design and construction innovation, combined with high ambitions for sustainability, required finding a remarkable firm. With the grant's support, an international design competition by the University of Arkansas garnered proposals by 69 firms from 10 countries in 2019. Grafton Architects of Dublin, Ireland—recipients of the 2020 Pritzker Prize—with Modus Studio of Fayetteville, Arkansas, were chosen from six finalists as the project team.

#### **Growing Influence and Momentum**

Alone, each project netted excellent results—but together, the synergies powered by the school's advocacy influenced many practices beyond architecture to think about the virtues and values of mass timber in Arkansas. Contractors, economic development, private forest owners, facilities planners, developers, and more were all influenced within the State.

Not surprisingly, these extraordinary efforts caught the interest of the developers of the new 350-acre Walmart headquarters campus in Bentonville, who have now chosen mass timber for their new Walmart Home Office. These influential endeavors collectively built a path for the Structurlam Mass Timber Corporation to expand its operations and site a new plant in Arkansas.

#### Caring for the Land and Serving the People

The intersection of vision, strategy, and real-world success for getting mass timber into the mainstream in Arkansas creates the necessary momentum to champion innovative wood use. Promoting forest health and rural economic development expands and creates markets for wood products that help support the USDA Forest Service's mission of long-term, sustainable forest management.

#### **More Information**

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#### **FAST FACTS**

- Arkansas is nearly 60 percent forested land.
- · Almost two trees growing for every mature tree.
- The State's forestry industry employs 25,000 people.
- Forests contribute \$5 billion/year to the State's economy



Dean Peter MacKeith in the University of Arkansas woodshop of Vol Walker Hall (home to the Fay Jones School of Architecture and Design). Courtesy photo by Russell Cothren.

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